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*      20      *      40      *      60      *      80
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smbi01.4 : -----TMMSNRYPPAKDPNIPFPIMLDACGRWQDUES-----VS : 55
cyl1Aa : -----MNNPNIINECIPYNCISNPEVILG-----G-ERLETGYTPI : 36
cyl1Ac : -----MNNPNIINECIPYNCISNPEVILG-----G-ERLETGYTPI : 36
cyl1Ia : -----MNNPNIINECIPYNCISNPEVILG-----G-ERLETGYTPI : 36
cyl2Aa : -----MNNPNIINECIPYNCISNPEVILG-----G-ERLETGYTPI : 36
cyl3Aa1 : -----MNNPNIINECIPYNCISNPEVILG-----G-ERLETGYTPI : 36
cyl3Bb : -----MNNPNIINECIPYNCISNPEVILG-----G-ERLETGYTPI : 36
cyl4Aa : -----MNNPNIINECIPYNCISNPEVILG-----G-ERLETGYTPI : 36
cyl4Ba : -----MNNPNIINECIPYNCISNPEVILG-----G-ERLETGYTPI : 36
cyl6Aa : -----MNNPNIINECIPYNCISNPEVILG-----G-ERLETGYTPI : 36
cyl7Aa : -----MNNPNIINECIPYNCISNPEVILG-----G-ERLETGYTPI : 36
cyl8Aa : -----MNNPNIINECIPYNCISNPEVILG-----G-ERLETGYTPI : 36
cyl10Aa : -----MNNPNIINECIPYNCISNPEVILG-----G-ERLETGYTPI : 36
cyl16Aa : -----MNNPNIINECIPYNCISNPEVILG-----G-ERLETGYTPI : 36
cyl19Ba : -----MNNPNIINECIPYNCISNPEVILG-----G-ERLETGYTPI : 36
cyl24Aa : -----MNNPNIINECIPYNCISNPEVILG-----G-ERLETGYTPI : 36
cyl25Aa : -----MNNPNIINECIPYNCISNPEVILG-----G-ERLETGYTPI : 36
cyl39Aa1 : -----MNNPNIINECIPYNCISNPEVILG-----G-ERLETGYTPI : 36
cyl40Aa1 : -----MNNPNIINECIPYNCISNPEVILG-----G-ERLETGYTPI : 36

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FIG. 1A

	*	100	*	120	*	140	*	160	
exm1014	:	DIYTGITLQFLLEPGIGGIPVIFSIINKLIPSSG----	QSVAA	SLC	OLYS	IIIRKEVDESVLSDGVADFCG--	WNTAYO	: 130	
cr14a	:	DISLSLTQFLLEFPFGAGFVGLVDIITGIFGPG-----	WDAFF	VOIE	OLINQRIE	FARMOAISRELG--	LSNLY	: 107	
cr14ac	:	DISLSLTQFLLEFPFGAGFVGLVDIITGIFGPG-----	WDAFF	VOIE	OLINQRIE	FARMOAISRELG--	LSNLY	: 107	
cr14a	:	TGIGTAGKILGTGLVPPAGOVASLYSFLGELWP--KG-KNO--	WEI	FMEHVEE	IINOKI	STYARUKALTDKG--	LGDAL	: 135	
cr12aa	:	VAPVGVVSFLKKVGSLLKGRILSELWGLIFPGSGS----	TNMOD	ILRETE	QF	LNQRLMTDTLARNAE	LIG--LOANI	: 124	
cr13aa1	:	KGISVVGDLGVGGVFPFGALVSFYINFMTIUPS-----	EDP--	UKAFME	QVEALMD	QKIADYAKNKALAE	LQG--LQNNV	: 148	
cr13bb	:	TGISVVGDLGVGGVFPAGALTSFYQSFMTIUPSD--ADP--	UKAFMA	QVEV	LI	DKKIEYAKSKALAE	LQG--LQNNF	: 141	
cr14aa	:	AYIIVGVTLTGFTTIPGLGALIGFTLIPVLFPFAQ--	DQSNW	TUSD	FT	ITQIKILKGLASTYISNA	NKILNR--SFNVI	: 148	
cr14ba	:	TALKVAGAILKFWNPAGFTVLTAVLPILQFTWTP--	TPERV	WMD	FT	ITWGNLIDUTVATVYKTDANAK	MTV--VHOYL	: 123	
cr16aa	:	EWATIGAVIQTLGLPVNEQQLRTHVLSODISIPDSQL	YDV	YVCS	DKTSAEWUN	KHLYPLIKSAND	IASYG--FKVAG	: 121	
cr17aa	:	TVVSYGATLSALGYPGASFTINFYKTIAGLWPEW--	GKI--	WDE	FMTVE	ALIDQKIEEYVUNKA	ELDQ--LGSAL	: 134	
cr18aa	:	TGIGVGRILGALGVPFASQIASFYSFIVGQLWPSKS--	WDI--	WGE	INERVEL	VDQKIEKYKOKALAE	LQK--LGNAL	: 145	
cr19aa	:	AGIIVGTMIGCAAPVLAAGIISFTLLPIFQGS----	DPANV	QD	LLIMG	RIPIQIEDIKNI	INVLTSIVTP--IKNQL	: 149	
cr16aa	:	KGLGIVSTIVGFGGSIIIDTGLFYQISELWPEDD--	TQOY	TWOD	IMHVED	LDKRLTEVIRGWAIR	TLAD--LOGKV	: 146	
cr19ba	:	QLFKVGGSIYAKLIG--KIPVGP	LLSNV	S	LFUPTIE--	EKNIV	WEDMHIKTVAMLLKQELTNDTLN	RAETSLG--LINESL	: 138
cr124aa	:	KIVSVTLKTLAKAVASSLDAKSISGLSKITTENN-----	VSQSN	VQVHQ	IIINRS	IOETI	LLDGLGSSING--LVATYN	: 136	
cr125aa	:	VLASIVSTIMLATSPSIGDAFALVSSIGYUPTKT-----	SFTL	SVAD	WNLSIR	REALDQNA	INRATGKFNQ--LMDTYN	: 134	
cr139aa1	:	TGWSMLSTLSLFGPIPLIGEGDILLGAADFUPESD	GCHQY	TUED	LNHIE	ELWDE	LETETKRYTALDDIRG--LKALL	: 142	
cr140aa1	:	TITSIGDILDEFINEPPLGGINTLFSIIGKLITPNH----	QSVSA	LS	ICOLL	SIIRKEVADSVLSDA	ICRFDGKIKNRY	: 130	

FIG. 1B

exai01.4	:	DYVLYHLEDBLTD	---	K-S	---	NPKKLADVVKQFQAREEDYKLLAGSLSRQ	----	KAEILLLFTYVQAANVHLLLRDAV	:	200
crv1aa	:	QIYAESFREGEADP	-----	TNPALREEMRIQFNDMNSALTTAIPLLAVQ	-----	NYQVPLLSTVYQAAMHLHLSVRDVS	-----	NYQVPLLSTVYQAAMHLHLSVRDVS	:	176
crv1ac	:	QIYAESFREGEADP	-----	TNPALREEMRIQFNDMNSALTTAIPLLAVQ	-----	NYQVPLLSTVYQAAMHLHLSVRDVS	-----	NYQVPLLSTVYQAAMHLHLSVRDVS	:	176
crv1ia	:	AVYHDSLESUVGN	-----	RWNTARSVWKSQYIALELMTVOKLPSFAVS	-----	GEFVPLLPYTAQAAMHLHLLRDAAS	-----	GEFVPLLPYTAQAAMHLHLLRDAAS	:	204
crv2aa	:	REFNOQVDMFLNPT	-----	QNPVLSITTSVYNTNQQLFNLKLPQVUIG	-----	YOLLLLPLFAQAAMHLHLSFRDVI	-----	YOLLLLPLFAQAAMHLHLSFRDVI	:	192
crv3aa1	:	EDVYSAISSWQKNPY	-----	SSRNPHQGRIRLFSQAESHFRNSMTPFAIS	-----	GYEVLFLTTYQAQAANTHLLLRDAQ	-----	GYEVLFLTTYQAQAANTHLLLRDAQ	:	220
crv3bb	:	EDVYVNAIWSUKTPL	-----	SLSRKSODRIRELFSQAESHFRNSMTPFAIS	-----	KFEVLFLTTYQAQAANTHLLLRDAQ	-----	KFEVLFLTTYQAQAANTHLLLRDAQ	:	213
crv4aa	:	STYVHNLKTNEMNPM	-----	PONTUDVRTQIQLVHYHFQNVIPELVNSCPPNPSCDYTHILVLSYAQAAMHLHLYNQAV	-----	YOLLLLPLFAQAAMHLHLSFRDVI	-----	YOLLLLPLFAQAAMHLHLSFRDVI	:	225
crv4ba	:	DQYTTKFTWKRFPN	-----	SYRTAVITQFMLTSAKLRETAIVFSNVLGVLELPLLPYTAQVANFLLLRDGL	-----	ILLIKEAKQVTEAAKNIVTSLDQF	-----	ILLIKEAKQVTEAAKNIVTSLDQF	:	193
crv6aa	:	DPSIKKQGYFKKLUD	-----	ELDNIVDNNSDDAIATAIKQFKARCG	-----	ILLIKEAKQVTEAAKNIVTSLDQF	-----	ILLIKEAKQVTEAAKNIVTSLDQF	:	186
crv7aa	:	DKYQKALADWLGK	-----	QDDPEALLSVATEFRILDSLFEFSMPSFKVT	-----	GYEILPLTTYQAQAAMHLHLLRST	-----	GYEILPLTTYQAQAAMHLHLLRST	:	203
crv8aa	:	DYVQOQSLDQLEN	-----	RNDARTSVSVENQFIADLNFVSSIPSPFAVS	-----	GHEVILLAVYAQAAMHLHLLRDAAS	-----	GHEVILLAVYAQAAMHLHLLRDAAS	:	214
crv10aa	:	DKYQEFDDKQEPAR	-----	THANAKAVHDLFTTLEPIIDKOLDNLKXN	-----	ASYVRIPTLPAYAQIATWHMLLKHAA	-----	ASYVRIPTLPAYAQIATWHMLLKHAA	:	218
crv16aa	:	DYVHNLKKNKQODP	-----	KSTGMLSTLVKTKTALDSDFNAGIARTYNNIGS	-----	GYEVLPLLPYTAQAAMHLHLLLRDAQ	-----	GYEVLPLLPYTAQAAMHLHLLLRDAQ	:	208
crv19ba	:	NIYVRALAAKQKQK	-----	NNFASGELIKSTYINDLHLFTROIQSDFSIG	-----	GYETVLPSYASAMHLHLLLRDVA	-----	GYETVLPSYASAMHLHLLLRDVA	:	206
crv24aa	:	RDYLGALAEAMNNK	-----	SNINVTQNVAAFKTIVERFTFKIGIYRTS	-----	SSQITLLPFTTQAAMHLHLSMRDAV	-----	SSQITLLPFTTQAAMHLHLSMRDAV	:	206
crv25aa	:	TVYVKNLQDQVDTIRIPANPOGDSQLEAARSLEEIERDPKHALAGEFAAG	-----	SOIVLLPFTTQAQAANTHLLLRDAV	-----	SOIVLLPFTTQAQAANTHLLLRDAV	-----	SOIVLLPFTTQAQAANTHLLLRDAV	:	210
crv39aa1	:	GLFRQAFDSUEKQK	-----	MDPIAKNEVGGYFEDVHTHFYKQMASISFAT	-----	NYEVLPLLPYTAQAAMHLHLLLRGV	-----	NYEVLPLLPYTAQAAMHLHLLLRGV	:	212
crv40aa1	:	EYVLYPYLEAMLRDQKPL	-----	QKTWNNSDIGNVYKFEIASERDFTNELIGGSUARN	-----	NAQIILLPLPYFCASCKQULLLRDAV	-----	NAQIILLPLPYFCASCKQULLLRDAV	:	205

FIG. 1C

	*	260	*	280	*	300	*	320
exn1014	:	KYKRWG-----	LVCPPLYPGS----	GRDQNERIKAKIKETVNYCVGVNKGGLDQIRQAQTSAEV	----	USKFNKFR	:	266
cr171a	:	VFGQWGFDA--	-----	TINSRYNDLTRLIGNYDYAVRYNTGLERVWGPDSRD	-----	WVRYNQFR	:	234
cr171c	:	VFGQWGFDA--	-----	TINSRYNDLTRLIGNYDYAVRYNTGLERVWGPDSRD	-----	WVRYNQFR	:	234
cr171e	:	IFGEWGLSSS--	-----	EISTFYNQWERAGYSOHCYKQYSTGLNNLRGTNAES	-----	WVRYNQFR	:	262
cr172a	:	LNADEWGLSAAT	-----	LRTYDYLRNYTRDYSNYCIYTYAFRGLNLRH	-----	DMLEFRT	:	246
cr173a	:	IFGEWGYEKE--	-----	DIAE FYRQLKLTQETDHCWGVNNGDLRGSSVES	-----	WVRYNQFR	:	278
cr173b	:	VFGEWGYSE---	-----	DVAE FYRQLKLTQETDHCWGVNNGDLRGSTYDA	-----	WVRYNQFR	:	271
cr174a	:	KFEAYLKMRQF--	-----	DYLEPLTAIDYPPVLTAKAEDYTNVCIYTKKGLNLKLTIPDSMLDGNINUNYNTYRT	-----	WVRYNQFR	:	297
cr174b	:	INAEUSILAR--	-----	S--AGDQLVNTMVQYTKETVIAHSITVWNGGLDVLNKSNG	-----	WVRYNQFR	:	251
cr176a	:	LHGDQKLEGVIN	-----	IQKRLKEVQTALNQAHCESSPAHKEELLEKYKMLKT	-----	WVRYNQFR	:	238
cr177a	:	LYGDWGFQTN--	-----	NIEENYNRQKRISYSOHCITKQYNSGLSRNLGSIYEQ	-----	WVRYNQFR	:	261
cr178a	:	IFGEWGFPG--	-----	EISRFYNRQVQLTAESYDVCVKQYKTKGLKGLTKTS	-----	WVRYNQFR	:	272
cr1710a	:	TYNIIUNONGIMPSTFN	-----	SSNYTGYLKEKIOEYDQYCIOTYNAGLTIRINTHAT	-----	WVRYNQFR	:	283
cr1716a	:	LYGDQWSARAN	-----	RONYTIQLEKTEYTYCINWYNGKGLNDFRTAGQ	-----	WVRYNQFR	:	275
cr1719a	:	IYG-KELGTPST	-----	D-----VEFYNYEQYTKERSYCNVNTYKSGLESKQIG	-----	WVRYNQFR	:	263
cr1724a	:	MYGEGWNLQSH--	-----	INYSKELDDALEDYTNVCEVYTKGLNALRGSTAD	-----	WVRYNQFR	:	262
cr1725a	:	QRFDTGLIRPVG	-----	VPITTSADPFESEFLRIKTKTDHCTISYDDGLAKTRSGSDG	-----	WVRYNQFR	:	278
cr1739a	:	IYGSRWGLTAPA	-----	ADFYHDQLKATYAIYAHCTVYWNGLAQKELFAKSPN	-----	WVRYNQFR	:	271
cr1740a	:	QYEEQUFPFLSAENVRSELLSPNSGCDFTGDYYERLKKIAEYTDYCEVYVQAGLNQIKQAQGTGADT	-----	WAKFNKFR	:	281	:	281

FIG. 1D

	*	420	*	440	*	460	*	480
exml014	:	VTULQADIVSHSMLQ-----		LGVLSCUGGTRHYEDFTX--		CNGAFORMSGTTSNNPRMIFGNDIFKISLARY	:	402
crz1aa	:	MDLMSITTYDVRG-----		FNYUSGHQITASPVGSPGEFAPFLGHNAGAA--		PP-VLVSFLTGLGIFRTLSLSP	:	365
crz1ac	:	MDLMSITTYDAHRG-----		YYYUSGHQITASPVGSPGEFTFLPYLGTNGAA--		PQORIVAOIGQGVRTLSSTL	:	366
crz1la	:	LDFLQVITYSLLS-----		RUSNTQYNNMUGGHKLEFRITIGTLMISTOGSTNTS		INPV--TLPFTSRDVRVTESLAGLNF	:	410
crz2aa	:	LSCIGTSLSITTPHIG-----		GLPGSTTHLSNARVYSGGVSSGLICATLNNHFNCS		TVPPLSTFFVRSULDSG	:	381
crz3ael	:	FYLHRIOFHTRPQ-----		GYVGDSTFYUSGNTVSTRPSIGNDIITSPFYGNKSE--		PVQMLEFNGEKYRVAANTDV	:	416
crz3bb	:	FVLOGIEFHTRLQP-----		GYFGKDSFNYSUGNVEITRPSIGSKITITSPFYGNKSE--		PVQKLSFDQGVKVRTAANTDV	:	409
crz4aa	:	FTULDSLNFTEKAQIT-----		P-----		NNFTSHYNNFHYTLDNISQKSSVFC--		429
crz4ba	:	FTULKRVDFWTITVQ-----		D-----		LRFLSANKIGFSTYNSAMQESGIGSSGFSN--		388
crz6aa	:	IGMLNSIMTIDBLYS-----		-----		QGEAIKVFQKIGUATQIAQIENLRITLSLQEVQDSDDADEIJELEADSD	:	368
crz7aa	:	VDYDELIVYTSKYKAF--		SHEIOPDLFYUSAHKVPKKSQSN--		LYTTIGIVGKISCYL--SSGAVSPHGNDIVRTLAAPSV	:	402
crz9aa	:	FDLLSSVEINTSRGGL--		TLNDDAYINYSGHTLKRKTADSTVYTYAMGRITSEKM--		SPALEDRODIFEINTSTVANLAN	:	422
crz10aa	:	FTULNGRFFYTRNSR-----		DILDPYDIFSTFGNQMAFTHTNDDRMIUGAVHGNII		SQDTSKYFFFYFNKPI	:	409
crz16aa	:	FTULKGFPRFTNSISY-----		-----		BTFLSGGONKYVYNNS--SINEGPRGQDITYGCTSTINIPNSVYVNLWTENY	:	410
crz19ba	:	FTULKGFPRFTYNSINS-----		-----		BTFLSGCENRYFLTHOEGTYNGPFLGQDTEYGGTSSYDIDENSSSIVALTUKNY	:	404
crz24aa	:	VKULGDMFTYTGADISYRTPSP		GBRIGVYVYGNINAFYHRTQDVFVNFRTQD		TAYEDP--STFISMLIYDDIVKDLRAAA	:	412
crz25aa	:	FNYLNSVOLFASTVYNS--		NN-----		CEVLGNLKNKIMFGEGMTASRGDGVTTGTFTSINDGSGYGNKPRKHAETRS	:	419
crz39ael	:	VTULRGDFYTRIKYA-----		Y-----		URYLAGHTNYESFTGNG--TIYSSSNVVDYDNTKSTININIPYAMIKYUKITSY	:	404
crz40ael	:	VTULRSIGIYNEYVSR-----		YFSCWGVTHRYVEDYIT--		ONGCNFURMSGTTSMDLROISFPNSDIFKIESKAIN	:	416

FIG. 1F

	*	500	*	520	*	540	*	560
oxmi014	:	AMQPFVGYSPRHLVSRAEFFPTITLNTFLYEVNSS--GYSOITIEVLPGINKOLPP-----						SRWYSHRLSNAACVQN : 473
civ1aa	:	YRRILIG--SGPNNQELFVLDGTEFSAFLITNLPTIYRQRGTVDLSIDVPPQDNSS-----						VPRAGFSHRLSHVMTLSQ : 439
civ1ac	:	YRPTN--IGINNQOLSVLDGTEFAVG--TSSNLPAAVYKSGTVDLSIDVPPQNN-----						VPRUGFSHRLSHVSMTRS : 438
civ1ia	:	LTPQVNGVPRDTHKVPTRHPIASDNFFPGYAGIG-----TQJQSENELPPCATG-----						QPNWLESYSHRLSHCLISA : 481
civ2aa	:	TDREGVATSTNQTIESFUTLLSIRCGAFSARGSNYPFDYFIMISGVPVIRIED-----						LTRPLHYNQINIESPSG : 455
civ3aa1	:	AVUPS--AVYSGVKVEFSOYMDQDEASTUTYDYSKRN--VGAVSUWSIDQLPPEITD-----						EPLKGYSHOLVNVNCTLM : 489
civ3bb	:	AAUPNGKYYLGVTKYDVSQYDQZQMETSTQYDSKRNNGHVSAQSDIDQLPPEITD-----						EPLKAYS HOLVNAECTLM : 484
civ4aa	:	DNKYLNDYNNISKDDFFITITGTRLELEKELTAGSGQITVDVNMKIFGLPIKRRNUGMPTLFYTDNYSHLLSFIKISLI						: 509
civ4ba	:	P---S---NRATKDDFYKIDGTLASYNNSHITTP---EGLRITTFGFSTINETPNQ-----						PTVADYTHILLSVKTDSVI : 453
civ6aa	:	AULYVAQEARDFTLMAYSHTSRUNLPINVLSDSCNCTTNTMTSNQVSNPTNMTSM-----						QYMLSHEYTSIPNNFHLSRN : 444
civ7aa	:	VVYPY---TQNYGVEQVEFYGVGKHVHYRGDNKYDIT-----YDSIDQLPDDGE-----						PIHEKYTHRLCHATAIFK : 466
civ8aa	:	YQKAYGPGSGMFWHVKSGTSTTAYLSKTHIALQG--CTQVYSSDEIPLDRT-----						VPPVAESYSHRLSHITSHSF : 494
civ10aa	:	DKYEIVRREYSDILIVEMIFFSBSSEVFRVSSNLTENNVRKTDVYMPIKQTKUM-----						FEYGHITLSYKTDNY : 479
civ16aa	:	EYIYPGDPVHITKGNFVTDNNSSKELIYGARINKPVRKTDNFLINKEGTGL-----						AKYNDYHLLSYMLINGE : 483
civ199a	:	EYIYPTDTPVMTIKLNFITDNNSSSEIYGAERNKPTVRKTDNFLINRAGNCP-----						TTYNDYHLLSYMLINGE : 477
civ24aa	:	AVSTIQGANDTITFGVSSSRFFDIRGNQLYUSNKP--YPSLPTITITTFGESEGEN-----						ANDYSHLLCDVKILQE : 482
civ25aa	:	QALPGLNNSHVLVGLDSFRAIGPGGQGHFTSLPGGDNVDCRQVIMPLEDYRNS-----						DHUISDMTINOSVOL : 491
civ39aa1	:	TNLSPTYDPVGISQWOFSLTNQULTYTGTSAPKY-----VRETFEIPPTDEKP-----						LYTENYSHLLSYNTSAQH : 473
civ40aa1	:	NLVGEIN--ARPEYRVSRAEFSEFATFVLYDAGNSG--LSENTITSLPGIKNPEP-----						SYRDYSHRLSNAACVGA : 486

FIG. 1G

	*	580	*	600	*	620	*	640
cxmi014	:	ETS-----RVNVGTHTSMKONRILYDPDKITQIPAVKAFALPAGTCYAGGYVT-AGPCFTGGDGVTLPYQAS-----	:	540				
cr1y1aa	:	AAG--AVYTLRAPFTSQHRSAAEFNNIIPSSQITQIPITKSTMLSGTGSV-----VKGPFTGGDILKRTSPG-----Q	:	506				
cr1y1ac	:	GFNSNSVILRAPFTSQHRSAAEFNNIILASDITQIPAVKGNFLPMSGSI-----S-GPCFTGGDVLKMLSGMIMNR	:	511				
cr1y1la	:	S-----HYKALVYSWTHRSADRTNTHIEPNSITQIPLVKAFNLSSGAIV-----VRGPCTGGDILKRTN-----TGT	:	543				
cr1y2aa	:	TPGGARAYLVSVNRRKNNTYAAMNGTMHLAFEDYFTTISPIHATOVNNUTRTFISERFGNQGDSTRTFSN-----	:	529				
cr1y3aa1	:	QGS-----RGTIPVLTWTHRSVDFNMIDSKKITQIPLVKAYKLQSGASV-----VAGPRFTGGDILKCTE-----NGS	:	553				
cr1y3bb	:	QDR-----RGTIPFTWTHRSVDFNMTDAEKITQIPVVKAYALSSGASI-----IEGPGCTGMLLFXESS-----NSI	:	550				
cr1y4aa	:	PATY-----KTQVYTFATWTHRSVDPKNTIYTHLTQIPAVKANSLSGTASKV-----VQGPHTGGDLIDFKDHFKIT-----	:	576				
cr1y4ba	:	DYN-----SHRVSFANTHKIYDPNNQIYTDALITQVPAKSNFLMATAKV-----IRGPGHTGGDLVALTSGTILSGRM	:	521				
cr1y6aa	:	SNLEVKCPENPFMIYVYNNSDVYNNSDVYNN-----	:	475				
cr1y7aa	:	STP--DYDNATIPISWTHRSAAEYNNRIYPNKITQIPAVKAYKLDDPSTV-----VKGPCTGGDLVKRGS-----TGY	:	533				
cr1y8aa	:	SKMG--SAYYGSFPVFWTHTSADLNTIYSDKITQIPAVKGBMLYLGGSV-----VQGPCTGGDILKRTN-----PSI	:	562				
cr1y10aa	:	IFSVVR--ERRRVAFSWTHTSVDFONTIDLDNITQIHALKALVSSDSKIVK-----GPHTGGDVLKDSND-----	:	546				
cr1y16aa	:	TFGQ-----KRHGYSFAFTHSSVDPNNHTIAANKITQIPVVKASSINGSTISI-----EKGPCTGGDILVKRQADS-----	:	547				
cr1y19ba	:	TFGQ-----KRHGYSFAFTHSSVDVNTIYDPKIVQIPAVKTNLVGANIIR-----GPHTGGDILKLEYER-----	:	539				
cr1y24aa	:	DSSNICEGRSSLSLHAWTHASLDNNMTILPDEITQIPAVTAYELRGNSS-----VYAGPGSTGGDILVKMSYHS-----	:	550				
cr1y25aa	:	ASNPTQTFATFALSLSGHHHSAGNRVYVDKTIQIPATKIVPEHMLK-----GPGCTGGDLADLSNYS-DILOY	:	561				
cr1y39aa1	:	FGD-----KIGITVFAWHHSVDFDNRVDPDKITQIPAVKGBYLQGVYK-----QGPHTGGDILVSMIRDR-----	:	536				
cr1y40aa1	:	GNS-----RINVTYGTWTHTSMSKYNLITPYDPKITQIPAVKAFDIDSTG-----PGQVI--ACPGHTGGNVSLPYYSR-----	:	550				

FIG. 1H

	*	660	*	680	*	700	*	720
exml014	:	--LKIRLTSAPTUKNVRVRIRYASGCGPFRVERWS--	PSSVSHANFSRPA	TGG	----	YSS	----	FDYVDLTVITFN : 605
cry1aa	:	ISTLRWNTAPLSQRVRVRIRYASTTNLQFHTSIDG--	RPINGWFSATHSSG	----	SMLOQSGFRIVGFTT	PNF	:	576
cry1ac	:	GYIEVPIHFTSTRVRVRIRYASVTPHLMNVUGN--	SSIFSNTPATATSL	----	DMLQSDQGYFESANA	FTS : 581		
cry1ia	:	FGDIRVNIIMPFAQRVRVRIRYASTDQFHTSING--	KAINQGNFSATMBRG	----	EDLDYKFRIVGFTT	PSF : 613		
cry2aa	:	--TTARYTLRGNSYNYLREVSIGNSTIRVINGRVYTVSVNVTINNDGVN	----	DNGARFSOLINGHIVASDRT	:	601		
cry3aa1	:	AATIVYTPDVSYSUKYRARIHVASTISQITFTLSLDG--	APFNQYDFDKTMKG	----	DTLVTNSFNLSASTP	PEL : 623		
cry3bb	:	AKFTVTLMSAALLQRYVRIRYASTTMLRLFQONS--	NDFLYIMKTMKNO	----	DOLTVQTFDLATNSMGF	: 620		
cry4aa	:	-----COHNSFQSYFIRIVASNG--	SANTRAVI	--	NLSIPGVAELGHALNPTFSGD	YTNLKYDQYLFESNEVKF : 646		
cry4ba	:	EIOCKTSIFMDPTRSGYRIRIYAANSPIVLNVSYVL--	QGVSRGTTISTESTFSRPNMIIPTDLKYEERFYKOP	FD	AI	VP : 599		
cry6aa	:	-----	-----	-----	-----	-----		
cry7aa	:	IGDIKATWNSPLSKYRVRIRYATNVSGOFNVYIND--	KITLOTKFQNTVETLIG	----	KOLTVGSGFYEVSTT	ITOF : 606		
cry8aa	:	LGTFAVTWNSLSQRVRVRIRYASTDPEFTLYLG--	DYIEKRNKMTKONG	----	ASLTYETFKFASFTD	TFQF : 631		
cry10aa	:	---FVRFLKNSRQYRVRIRYATNAPKTIVFLTG	IDTISVELPTTSRQPN	----	ATDOLTVADFGYVTF	PRIVPN : 616		
cry16aa	:	GLTMKFAEILLDKYRVRIRYKVCNYSKLLRKQKGEY	IQOIHNSPTYG	----	AFSYLESFTLITENI	FDL : 618		
cry19Ba	:	-FLSLRLK-LIASNTRIRIRIYASNISGQMMINIG	----	YQNPFTYNIPTTSRDY	----	TELKEDFQIVDTSY	ITSG : 608	
cry24aa	:	--VNSFKYKCEELKNVRIRIRYASHGWCQFLMKRUP	PSGTVAPQWARRHNVGUTFS	----	NMRYEAKFYLDIF	ITTFTE : 622		
cry25aa	:	DLRSDYDRLTDPVPRIRIRICASIGVSTISVDNUG--	SSSQVTVASTAAS	----	LDTLKYESFQVYSI	PGNYVF : 631		
cry39aa1	:	---LGTNVYFPQPLDYRIRIRIYSTSSNGVLYVSPN	KIVLPPTTLVDGQPT	----	FDPMDFSAFRVVEV	VPASFA : 606		
cry40aa1	:	--LKIKLIPASTMKNYLVRVRYTSTSNORLLVERWS	-PSSISNYSYFPLSTGP	----	GDG	----	FGYVDLTVITFN : 615	

FIG. 11

